

## BEFORE THE PUBLIC SERVICE COMMISSION OF WISCONSIN

In the Matter of the Commission's  
Quadrennial Planning Process II Notice of  
Investigation and Request for Comments

PUC Docket Number:  
5-FE-100

Comments of Opower, Inc.

## **I. Introduction**

Opower, Inc. ("Opower"), a behavioral energy efficiency and smart grid software company, appreciates the opportunity to comment in response to the Public Service Commission of Wisconsin's (the "Commission") July 3, 2013 Notice of Investigation and Request for Comments.

These comments respond to the Commission's request for feedback on the scope of inquiry for the second Quadrennial Planning Process. As the Commission considers the appropriate targets for energy efficiency programs, Opower urges the Commission to conduct a new energy efficiency potential study that includes behavioral program potential in order ensure that future targets and goals are set based on the most up-to-date market information and takes into account innovations in the marketplace that will produce broad benefits for Wisconsin residents and businesses.

## **II. About Opower**

Opower is the global leader in behavioral energy efficiency and smart grid customer engagement. We currently partner with 85 utilities to deliver energy savings to 17 million residential households across twenty-eight US states and seven countries – including millions of households in the Midwest. For example, in Illinois and Minnesota we're reaching over half a million households in each state. Opower works with utilities and statewide implementers of energy efficiency programming to motivate customers to use less energy and save money on their monthly bills by providing families with better information about their energy use and personalized energy savings advice. To-date, our programs have saved customers \$320 million on their energy bills – amounting to over 2.7 terawatt-hours of energy savings.

Opower's program consistently saves between 1.5-3.5%, across geographies and demographic groups, leading to significant energy and pocketbook savings at scale for consumers. These results have been verified by over twenty independent evaluations conducted by academics, economists, and consultants (e.g., Navigant, PowerSystems Engineering, etc.).<sup>1</sup> In addition, Opower's program maintains or improves savings as long as reports are continued. Now in their fifth year, the longest running deployments

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<sup>1</sup> An indicative sample of these reports is available at <http://opower.com/company/library/verification-reports>

have proven program durability.<sup>2</sup>

The Department of Energy's State & Local Energy Efficiency Action Network (SEE Action) – a consensus group that includes utilities, evaluators, policymakers, commission staff, and program vendors—recently released a study on M&V best practices for behavioral programs in which the methodology that Opower uses for measuring and verifying savings was awarded the top rating of 5 stars.<sup>3</sup> Our approach is also consistent with best practices recognized by the National Action Plan for Energy Efficiency guidelines,<sup>4</sup> the California Evaluators Manual,<sup>5</sup> and The Brattle Group's M&V Principles for Behavior-Based Energy Efficiency.<sup>6</sup>

### III. Comments

In order to inform energy efficiency goals and targets Opower urges the Commission to conduct a new energy efficiency potential study the purpose of which is to quantify the size of energy efficiency resources in Wisconsin and to identify major opportunities for energy savings. In addition, a new efficiency potential study would enable the Commission to take into account changes in the market since the last potential study was conducted in 2010. As the energy efficiency market has continued to evolve and innovate rapidly since the last Quadrennial Planning Process, the current process offers an especially opportune time to review and assess these changes to the market.

In addition, Opower recommends that behavioral program potential be included in the assessment of energy efficiency market potential as behavioral program potential was not examined in the last market potential study. Energy savings from behavioral energy efficiency can offer large-scale energy savings to states. Two recent potential studies from Colorado and New Jersey illustrate this point. In Colorado, a market potential study conducted by KEMA for Xcel found that behavioral program potential could save up to

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<sup>2</sup> See for example:

- a) Cooney, Kevin, February 2011. "Evaluation Report: OPOWER SMUD Pilot Year 2." *Navigant Consulting*.
- b) April 2012. "Puget Sound Energy's Home Energy Reports Program: Three Year Impact, Behavioral, and Process Evaluation." *KEMA Energy & Sustainability*.
- c) Dougherty, Anne, July 2012. "Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report." *Opinion Dynamics Corporation with Navigant Consulting*.
- d) Sutter, Mary, October 2012. "Impact and Process Evaluation of 2011 (PY4) Ameren Illinois Company Behavioral Modification Program." *Opinion Dynamics Corporation with The Cadmus Group, Navigant, and Michaels Engineering*.
- e) Wu, May, November 2012. "Impact & Persistence Evaluation Report: Sacramento Municipal Utility District Home Energy Report Program." *Integral Analytics, Inc with BuildingMetrics Incorporated and Sageview*.

<sup>3</sup> State and Local Energy Efficiency Action Network. 2012. "Evaluation, Measurement, and Verification (EM&V) of Residential Behavior-Based Energy Efficiency Programs: Issues and Recommendations." Prepared by A. Todd, E. Stuart, S. Schiller, and C. Goldman, Lawrence Berkeley National Laboratory. <http://behavioranalytics.lbl.gov>.

<sup>4</sup> National Action Plan for Energy Efficiency. "Model Energy Efficiency Program Impact Evaluation Guide." November 2007. Available online at: [http://www1.eere.energy.gov/office\\_eerre/pdfs/napee\\_evaluation\\_guide.pdf](http://www1.eere.energy.gov/office_eerre/pdfs/napee_evaluation_guide.pdf)

<sup>5</sup> California Public Utilities Commission. "California Energy Efficiency Evaluation Protocols: Technical, Methodological, and Reporting Requirements for Evaluation Professionals." April 2006. Available Online at: [http://www.calmac.org/events/EvaluatorsProtocols\\_Final\\_AdoptedviaRuling\\_06-19-2006.pdf](http://www.calmac.org/events/EvaluatorsProtocols_Final_AdoptedviaRuling_06-19-2006.pdf)

<sup>6</sup> Sergici, Sanem and Ahmad Faruqi. "Measurement and Verification Principles for Behavior-Based Efficiency Programs." May 2011. Available online at: [http://opower.com/uploads/library/file/10/brattle\\_mv\\_principles.pdf](http://opower.com/uploads/library/file/10/brattle_mv_principles.pdf)

132 GWh per year by 2020.<sup>7</sup> In New Jersey, a potential study conducted by EnerNOC found that behavioral program potential in the state could save up to 544 GWh and over 25 million therms over a three-year period.<sup>8</sup> Including behavioral energy efficiency potential will allow the Commission to gain further insight into a large source of cost-effective savings available to Wisconsin residents.

#### **IV. Conclusion**

As Wisconsin gathers information on the appropriate scope of the second Quadrennial Planning Process, Opower respectfully urges the Commission to conduct a new energy efficiency potential study in order to ensure that Wisconsin residents and businesses are able to fully capture the widespread benefits provided by energy efficiency. We offer our appreciation for this chance to comment.

Respectfully submitted,

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<sup>7</sup> KEMA, Inc. June 3, 2013. “Update to the Colorado DSM Market Potential Assessment (Revised).”

<sup>8</sup> ENERNOC Utility Solutions. July 9, 2013. “New Jersey Market Assessment, Opportunities for Energy Efficiency.”